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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,655	11/13/2000	Michael A. Freeman	1894-00501	7877

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12
EXAMINER

TUCKER, PHILIP C

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

711655

Applicant(s)

FREEMAN

Examiner

P. TUCKER

Group Art Unit

1712

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 2/24/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1 - 17, 19-27, 30-37, 39-49, 86 - 129 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 102, 121 is/are allowed.
- ☒ Claim(s) 1-17, 19-27, 30-37, 39-49, 86-101, 103-120, 122-129 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4,5 Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

Office Action Summary

Art Unit: 1712

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-17, 19-27, 30-37, 39-49, 86-101, 103-120, 122-129 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants specification fails to teach that the triggering signal is other than pressure of mechanically crushing by closing fractures or osmotic pressure. A negative limitation which appears in the claims and not in the specification introduces new matter (Ex parte Grasselli 231 USPQ 393).

In claim 106, the solid being a perforated gun holder is also not taught in the specification.

Art Unit: 1712

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 20, 21, 34-37, 39, 40, 43, 44, 46, 47, 86-90, 93, 95-100, 104, 105, 107, 108, 110, 112, 114, 115, 125, 127-129 are rejected under 35 U.S.C. 102(b) as being anticipated by Tjon-Joe-Pin (5806597).

Tjon-Joe-Pin teaches a well treatment fluid which comprises a polymer and a sequestered enzyme, wherein the enzyme is surrounded by a complex including a polymer and crosslinker. Upon a change in pH and temperature, the enzyme in the complex becomes active and breaks the polymer (column 2, lines 38-58). The used polymer or filter cake would be considered a contaminant in the wellbore. The intended use of the fluid as a drilling fluid does not distinguish in claims such as 1 and 3, in which a specific drilling step is not specifically disclosed.

Art Unit: 1712

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 20, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tjon-Joe-Pin (5806597).

Tjon-Joe-Pin teaches a well treatment fluid which comprises a polymer and a sequestered enzyme, wherein the enzyme is surrounded by a complex including a polymer and crosslinker. Upon a change in pH and temperature, the enzyme in the complex becomes active and breaks the polymer (column 2, lines 38-58). Tjon-Joe-Pin differs from the present invention in that the specific enzymes of claims 31-33 are not disclosed. However, it would be obvious to one of ordinary skill in the art to utilize enzymes within the scope of claims 31-33, given the teaching of Tjon-Joe -Pin that Guar and cellulose specific enzymes may be utilized as the breaker of the complex therein (column 2, lines 15-17).

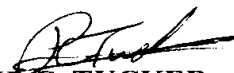
7. Claims 102 and 121 are allowable over the art of record.

Art Unit: 1712

8. Applicants amendment distinguishes over the prior art of Gupta, however such introduces new matter into the claims. Applicants arguments with respect to claim 46 are not deemed persuasive. The contaminant arising from, the subterranean formation does not mean that such originates from such formation. Furthermore the filtercake would include particulates which originate from the subterranean formation. A new rejection is presented in view of Tjon-Joe-Pin.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9310. The **after final** fax no. is 703-872-9311.

PCT-2799
May 3, 2003


PHILIP C. TUCKER
ART UNIT 1712